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## IMPROVED PERFORMANCE DIGITAL IMAGE SENSING

### ABSTRACT

5           Methods, systems, and media to capture a digital image are disclosed. Embodiments include hardware and/or software for taking multiple color data readings with sensing elements of an array in one collecting location during a single exposure, associating the collecting location with a pixel, and calculating a color value for the pixel based on the multiple color data readings. Embodiments may also include a device contemplating sensor elements,  
10         adapted to collect data to calculate a value for a pixel; and reflective optics to redirect a light to sensor elements successively within one exposure. Several embodiments include a system including sensors covered with filters to take filtered readings of light, a motor to move the sensors in succession per reading, a memory to store an association of readings with a pixel position, and a calculator to calculate a value based upon the readings from the sensor elements.